REMARKS

Claims 1-3, 5-6, 8 and 9 remain in this application. Claims 4, 7 and 10 have been previously cancelled. Claims 1, 5 and 8 have been amended. Claims 2 and 9 have been previously presented.

Applicants submit this Amendment to place this case in condition for allowance. Each independent claim has been amended to overcome the informality concerning the recitation that other nodes are not broadcasting other signals or messages for location or routing. As noted in paragraphs 15 and 16 of the instant application, if a node does not have the requested extension, the message is ignored. For example, each of nodes B and C in the example shown in FIG. 2 will ignore the message. If a node is connected to the requested extension, then that node replies to the requesting node that it has the queried target. Thus, as now claimed, at a second node to which the called device is coupled, a reply message is transmitted to the first node indicating that the second node is coupled to the called device such that other nodes not having the called device as a queried target coupled thereto ignore the queried message and do not transmit a reply message indicative that the respective node not replying does not have the queried target for location or routing.

The Examiner has applied another secondary reference, i.e., U.S. Patent No. 6,721,318 to Cai et al. (hereainfter "Cai") in combination with the previously cited U.S. Patent No. 6,647,264 to Sasamoto and U.S. Patent No. 6,741,696 to Moriyama, and argues that the claims are unpatentable because in the Examiner's opinion, it would be obvious to ignore the query message if the address is not in a table of the router as taught by Cai and the system of

Saramoto and Moriyama to reduce network traffic, by not sending the broadcast signals of Sasamoto. In conclusion, the Examiner states that the combination of Sasamoto, Moriyama and Cai will cut out the steps 604 and 605 of Sasamoto FIG. 6 so that the network will use less bandwidth and reduce network traffic before the start of data communication of the different private branch exchanges and routers.

At the outset, Applicants emphasize that FIG. 6 in Sasamoto cannot be read separate from FIGS. 7A-7C and FIGS. 5A and 5B, which are flowcharts of the operation of a mobile gateway shown in FIG. 3 according to the first or preferred embodiment in Sasamoto. FIG. 6 is a flowchart of the operation of the mobile router that works in conjunction with the mobile gateway method shown in FIGS. 5A and 5B. The sequence diagrams for the various operational phases of the mobile router and mobile gateway are explained in the sequence diagrams of FIGS. 7A, 7B, 7C, 7D and 7E.

Thus, to understand the cited FIG. 6 of Sasamoto used by the Examiner as a teaching in combination with Cai, it must be read in combination with FIGS. 7A-7E and 5A and 5B.

The Examiner concludes that steps 604 and 605 can be deleted or bypassed from the flowchart of FIG. 6, showing the operation of the mobile router. Indeed, it is clear that those steps cannot be deleted or bypassed because the technical purpose of Sasamoto is to reduce the delay involved in locating a destination mobile data terminal when the data terminal is moving at high speeds and it is necessary to perform fast handover operations. This is accomplished in the system of Sasamoto by ensuring that other nodes broadcast the paging signals S2 and define that the requested mobile station is not within their location areas. This constant

transmission of paging signals by all nodes in Sasamoto acts similar to a "redundancy" because it is directed to the tracking of fast moving data terminals and performing fast handovers. This function is clear when FIGS. 5A through 7E are read in conjunction with each other, as they should be, and not independently as the Examiner is doing.

Sasamoto particularly discloses in FIG. 7C as a sequence diagram that the other nodes as routed must broadcast paging signals S2 to find that the requested mobile station is not within their location areas. This is defined in column 6 starting at line 53 and continuing through column 7 at line 5 as was also referred to by the Examiner and also as indicated:

> "In FIG. 7C, a sequence diagram of incoming calls to the mobile station 130 according to the first embodiment is illustrated. In response to a first packet P1 from the data network 115, the gateway 114 sends search request messages S1 to the routers 111, 112 and 113. Since the location data of the mobile station 130 is stored only in the router 112, the latter responds with a reply message R, while the other routers broadcast paging signals S2 only to find that the requested mobile station is not within their location areas. Gateway 114 responds to the reply message R from the router 112 by sending the packet P1 to the router 112 and storing the routing data (DA, SA, RA) of the packet P1 in its routing table. Router 112 transmits the packet P1 to the mobile station 130 via the base station 131. When a second packet P2 arrives, the gateway 114 forwards it simply to the router 112 by using the corresponding data stored in its routing table and the router 112 relays the packet P2 to the mobile station. Subsequent packets destined for the mobile station 130 will be transmitted in the same manner as the packet P2."

The broadcast messages from each node are used by Sasamoto for storing the routing data such as at each node or router.

Moriyama is directed to the private branch exchange (PBX) as an automatic call distributing (ACD) system and there is no dynamic registration or assignment of individual stations within their network's automatic call distribution stations as a PBX.

Cai is mutually exclusive and opposite from Sasamoto, which requires all nodes to transmit always a paging signal in order to ensure the proper call handover with fast moving devices.

One skilled in the art would not be motivated to combine Sasamoto and Cai because Cai is directed to a router configured with a status membership to a multi-cast group address as a multi-cast routing system, where a host transmits a stream of data packets to a group of hosts on a wide area network (WAN). Cai dynamically updates memberships so that hosts can join and quit multi-cast group addresses. Hosts can be dynamically updated to tune in and out of multi-cast data traffic. Thus, Cai as shown in its FIGS. 2A and 2B could respond to a query message from an IGMP querying router 22 and the MOSPF router 10 determines whether there are static memberships to multi-cast group addresses. If no static memberships are found, a router can ignore the query message. If a static membership is found, the router starts a countdown of a random delay time on a software timer for each static membership. By waiting for a random number of delay times prior to responding, unnecessary messages reporting memberships to multi-cast groups, i.e., duplicates, are suppressed.

This is opposite from what Sasamoto is accomplishing in which every node always transmits out a broadcast paging signal S2 to ensure that any data terminals moving at high speeds can engage in fast handover operations.

Thus, one skilled in the art would not be motivated to combine Sasamoto, Moriyama and Cai to form the claimed system as now claimed in each of the independent claims 1, 5 and 8.

Applicants contend that the present case in condition for allowance and respectfully requests that the Examiner issue a Notice of Allowance and issue fee due. If the Examiner has any questions or suggestions for placing the case in condition for allowance, the undersigned attorney would appreciate a telephone call.

Respectfully submitted,

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